Reinvestigation of the structure of tellurium

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Abstract. Te, M_r = 127.6, trigonal, P3\bar{1}21 (P321), a = 4.456(1), c = 5.921(2) Å in hexagonal cell; V = 801.82(5) Å^3, Z = 3, D_x = 6.24 g.cm^{-3}, λ(MoKα) = 0.71069 for data collection and λ(MoKα1) = 0.70926 for unit cell constants, µ = 211.7 cm^{-1}, F(000) = 156, T = 293K, R = 0.0332 for 159 averaged unique reflections. A three-dimensional refinement of the structure gives more accurate values of the shortest contact: 2.8345(8) Å with angle 103.14(2)° and of next neighbour distances 3.4912(8), 4.441(1), 4.456(1) and 4.886(1) Å, respectively, than previously known.

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